

Claim Amendments

Please amend the claims as follows:

1. (currently amended) An ~~Electric~~ electric camshaft adjuster for adjusting and securing the phase angle of a camshaft of an internal combustion engine with respect to a crankshaft, comprising:

- a drive wheel which is connected fixedly in terms of rotation to the crankshaft,
- an output component which is fixed to the camshaft, and
- a harmonic drive having at least one ring gear-spur gear pairing, ~~one of the two components~~ gear being connected fixedly in terms of rotation to the drive wheel, and the other ~~component~~ gear having at least a torque-transmitting connection to the output component,
- ~~the~~ at least one spur gear being embodied as a flexurally elastic sleeve and
- being arranged at least partially within ~~the~~ at least one first ring gear,
- a wave generator which is driven by an electric adjustment motor by means of an adjustment shaft which is fixed to the gearing,
- the wave generator means for elliptically deforming the ~~flexurally~~ elastic sleeve,
- the sleeve is deformed ~~in such a way that~~ causing a torque-transmitting connection is to formed between the ring gear and the sleeve at two points on the sleeve lying opposite one another, ~~wherein~~ wherein at least one of the gears of the ring gear-spur gear pairing is formed in one piece with the drive wheel or output component.

2. (currently amended) An ~~Electric~~ electric camshaft adjuster for adjusting and securing the phase angle of a camshaft of an internal combustion engine with respect to a

crankshaft, comprising:

- a drive wheel which is connected fixedly in terms of rotation to the crankshaft,
- an output component which is fixed to the camshaft, and
- a harmonic drive having at least one ring gear-spur gear pairing, ~~one of the two components~~ gear being connected fixedly in terms of rotation to the drive wheel, and the other ~~component~~ gear having at least a torque-transmitting connection to the output component,
- ~~the~~ at least one spur gear being embodied as a flexurally elastic sleeve and
- being arranged at least partially within ~~the~~ at least one first ring gear,
- a wave generator which is driven by an electric adjustment motor by means of an adjustment shaft which is fixed to the gearing,
- the wave generator has means for elliptically deforming the ~~flexurally~~ elastic sleeve,
- the sleeve is deformed ~~in such a way that~~ causing a torque-transmitting connection is to formed between the ring gear and the sleeve at two points on the sleeve lying opposite one another,
- wherein the means for elliptically deforming the ~~flexurally elastic~~ sleeve are two bearing journals which are attached to the adjustment shaft and bear against two regions of the sleeve lying opposite one another, a roller bearing being arranged on each of said bearing journals.

3. (currently amended) ~~The Camshaft~~ camshaft adjuster according to one of Claims 1 or 2, wherein the sleeve is of pot-shaped design.

4. (currently amended) The Camshaft camshaft adjuster according to one of Claims 1 or 2, wherein a second ring gear is arranged in the axial direction next to the first ring gear and coaxially with respect thereto, the sleeve is arranged at least partially within the second ring gear and enters into a torque-transmitting connection with the second ring gear at two points lying opposite one another.

5. (currently amended) The Camshaft camshaft adjuster according to one of Claims 1 or 2, wherein the torque-transmitting connection between the ring gear and the sleeve is implemented by means of an external toothing of the sleeve which engages in an internal toothing of the ring gear, and the number of teeth of the internal toothing of the ring gear differs from the number of teeth of the external toothing of the sleeve.

6. (currently amended) The Camshaft camshaft adjuster according to one of Claims 1 or 2, wherein the torque-transmitting connection between the ring gear and the sleeve is implemented in a frictionally locking fashion by means of the interaction of the smooth internal lateral face of the ring gear and the smooth external lateral face of the sleeve.

7. (currently amended) The Camshaft camshaft adjuster according to one of Claims 1 or 2, wherein the electric adjustment motor is preferably embodied as a brushless DC motor (BLDC motor) which is operated in bipolar fashion and has a stator fixed to the cylinder head and preferably a rare earth magnet.

8. (currently amended) ~~The Camshaft~~ camshaft adjuster according to one of Claims 1 or 2, wherein ~~the~~ a motor shaft of the BLDC motor and the adjustment shaft have a connection by means of a rotationally fixed but radially movable or resilient coupling, which is ~~preferably~~ embodied as a polymer coupling.

9. (currently amendment) ~~The Camshaft~~ camshaft adjuster according to one of Claims 1 or 2, wherein a stop ring is attached to the drive wheel and has a lug which engages in a corresponding, annular-segment-shaped cut-out, which limits the adjustment angle, of the output component.

10. (currently amended) ~~The Camshaft~~ camshaft adjuster according to one of Claims 1 or 2, wherein a securing ring, whose external diameter corresponds at least to the tooth head diameter of the first ring gear, can be pressed into the ~~latter~~ tooth head diameter of the first ring gear.

11. (currently amended) ~~The Camshaft~~ camshaft adjuster according to one of Claims 1 or 2, wherein at least the adjustment shaft can have cut-outs for the purpose of reducing the weight ~~and/or can be composed of lightweight metal, plastic or a composite material~~.

12. (canceled)

13. (currently amended) ~~The Camshaft~~ camshaft adjuster according to one of Claims 1 or 2, wherein all the components or individual components, ~~preferably the toothing~~

~~components~~, of the harmonic drive are fabricated in a non-material-removing fashion.

14. (currently amended) The ~~Camshaft~~ camshaft adjuster according to Claim 5, wherein the components of the harmonic drive are fabricated in a non-material-removing fashion, and the toothings are subsequently hardened or nitrated.

15. (currently amended) The ~~Camshaft~~ camshaft adjuster according to Claim 1, wherein the means for elliptically deforming the ~~flexurally-elastic~~ sleeve is a wave ring with an elliptical external circumference and an elliptically deformed roller bearing attached thereto.

16. (currently amended) The ~~Camshaft~~ camshaft adjuster according to Claim 5, wherein the means for elliptically deforming the ~~flexurally-elastic~~ sleeve is a wave ring with an elliptical external circumference and an elliptically deformed roller bearing attached thereto, and ~~the~~ an external ring of the roller bearing and the ~~externally-toothed~~ sleeve are embodied in one piece.

17. (currently amended) The ~~Camshaft~~ camshaft adjuster according to Claim 15, wherein the elliptical wave ring and the internal ring of the roller bearing are embodied in one piece.

18. (currently amended) The ~~Camshaft~~ camshaft adjuster according to Claim 2, wherein the bearing journals are rotatably attached to the adjustment shaft using an

eccentric fastening means and can be secured in ~~any~~ a desired rotational angle position.

19. (currently amended) ~~The Camshaft~~ camshaft adjuster according to Claim 2, wherein the roller bearings have eccentrically formed internal rings which can be pressed onto the bearing journals in ~~any~~ a desired rotational angle position.

20. (currently amended) ~~The Camshaft~~ camshaft adjuster according to one of Claims 1 or 2, wherein all or some of the camshaft adjuster components are manufactured by means of stamped packetization.